O I P & 6116

COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

FORM PTO-1449 (Modified)

LIST OF PATENTS AND PUBLICATIONS

FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Sheet 1 of 9

In the Application of Wolffe and Collingwood

Serial No.: 09/844,508

Filed: April 27, 2001

1 110d. April 21, 2001

Art Unit: 1845 1636

Examiner: unassigned

Title: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

RECEIVED

MAY 1 4 2002

W 1 3 2002 TECH CENTER 1600/2500

tty Dkt No. 8325-0014

U.S. PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Date	Name	Class	Sub Class	Filing Date
45	AA-1	5,972,608	October 26, 1999	Peterson et al.			

FOREIGN PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Publication Date	Country or Patent Office	Class	Sı Cl	ıb ass	Trans YES	lation NO
05	AB-1	WO 95/09233	April 6, 1995	РСТ			1		
25 13	AC-1	WO 97/11972	April 3, 1997	РСТ	1				
M	AD-1	WO 00/23464	April 27, 2000	PCT	$\Box \Delta$		<u> </u>		
1	AE-1	WO 00/41566	July 20, 2000	РСТ	\				
6	AF-1	WO 00/42219	July 20, 2000	РСТ			<u> </u>		
17	AG-1	WO 01/52620	July 26, 2001	РСТ	\Box	1	<u> </u>	<u></u>	
3	AH-1	WO 01/59094	August 16, 2001	PCT					
15	Al-1	WO 01/68807	September 20, 2001	РСТ			<u> </u>		

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Examiner: Willin Sall

Date Considered: 3-6-03

COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) Sheet _2_ of _9_

In the Application of Wolffe and Collingwood

Serial No.: 09/844,508

Filed: April 27, 2001

Title: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

Examiner: unassign

Atty Dkt No. 8325-0014

Exam. Init.	Ref. Desig.	Description
4	AJ-1	Ahringer, "NuRD and SIN 3 Histone Deacetylase Complexes in Development," <i>Trends in Genetics</i> <u>16</u> :351-356 (2000)
Sy	AK-1	Bergel et al., "Structural and Functional Definition of the Human Chitinase Chitin-binding Domain," <i>Journal of Biological Chemistry</i> 275(1):514-520 (2000)
M	AL-1	Bird et al., "Methylation-Induced Repression-Belts, Braces, and Chromatin," <i>Cell</i> 99:451-454 (1999)
M	AM-1	Bochar et al., "A Family of Chromatin Remodeling Factors Related Williams Syndrome Transcription Factor," <i>Proc. Natl. Acad. Sci. U.S.A.</i> <u>97</u> :1038-1043 (2000)
4	AN-1	Boyes et al., "Regulation of Activity of the Transcription Factor GATA-1 by Acetylation," <i>Nature</i> 396:594-598 (1998)
M	AO-1	Cairns et al., "Two Functionally Distinct Forms of the RSC Nucleosome-Remodeling Complex, Containing Essential AT Hook, BAH, and Bromodomains," <i>Molecular Cell</i> 4:715-723 (1999)
B	AP-1	Cairns, B.R., "Chromatin Remodeling Machines: Similar Motors, Ulterior Motives," Trends Biochem. Sci. <u>23</u> :20-25 (1998)
M	AQ-1	Chen et al., "Regulation of Transcription by a Protein Methyltransferase," <i>Science</i> 284:2174-2177 (1999)
M	AR-1	de La Serna et al., "Mammalian SWI-SNF Complexes Contribute to Activation of the hsp 70 Gene," Mol. Cell Biol. 20:2839-2851 (2000)
4	AS-1	Devine et al., "After Chromatin is SWItched-on Can it be RUSHed?," <i>Molecular and Cellular Endocrinology</i> 151(1-2):49-56 (1999)

Examiner:

Date Considered: 7- 6-03



TECH CENTER 1600/2900
TECH CENTER 1600/2900
TEMENT

COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) Sheet 3 of 9

In the Application of Wolffe and Collingwood

Serial No.: 09/844,508

Filed: April 27, 2001

Art Unit: 1648

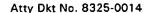
Examiner: unassigned

AKHAVAN

Title: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

Exam. Init.	Ref. Desig.	Description
ay	AT-1	Deuring et al., "The ISWI Chromatin-Remodeling Protein is Required for Gene Expression and the Maintenance of Higher Order Chromatin Structure In Vivo," Mol. Cell 5:355-365 (2000)
as	AU-1	Fryer et al., "Chromatin Remodelling by the Glucocorticoid Receptor Requires the BRG 1 Complex," <i>Nature</i> 393:88-91 (1998)
19	AV-1	Grunstein,M., "Histone Acetylation in Chromatin Structure and Transcription," <i>Nature</i> 389:349-352 (1997)
9	AW-1	Gu et al., "Activation of p53 Sequence-Specific DNA Binding by Acetylation of the p53-C-Terminal Domain," <i>Cell</i> <u>90</u> :595-606 (1997)
Ŋ	AX-1	Guschin et al., "ATP-Dependent Histone Octamer Mobilization and Histone Deacetylation Mediated by the Mi-2 Chromatin Remodeling Complex," <i>Biochemistry</i> 39:5238-5245 (2000)
M	AY-1	Hartzog et al., "Nucleosomes and Transcription: Recent Lessons from Genetics," <i>Curr. Opin. Genet. Devel.</i> 7:192-198 (1997)
19	AZ-1	Herrera et al., "Specific Acetylation of Chromosomal Protein HMG-17 by PCAF Alters Its Interaction with Nucleosomes," <i>Molecular and Cellular Biolology</i> 19(5):3466-3473 (1999)
1	BA-1	Holstege et al., "Dissecting the Regulatory Circuitry of a Eukaryotic Genome," <i>Cell</i> 95:717-728 (1998)
11)	BB-1	Imhof et al., "Acetylation of General Transcription Factors by Histone Acetyltransferases," <i>Current Biology</i> 7:689-692 (1997)

Examiner: Willia Sa. M. Date Considered: 3-6-	=03
---	-----



COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) Sheet <u>4</u> of <u>9</u>

In the Application of Wolffe and Collingwood

Serial No.: 09/844,508

Filed: April 27, 2001

Art Unit: 1645 1636 ALMANASSigned

Title: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

Exam. Init.	Ref. Desig.	Description
4	BC-1	Jacobson et al., "Structure and Function of a Human TAF 250 Double Bromodomain Module," Science 288:1422-1425 (2000)
9	BD-1	Kadam et al., "Functional Selectivity of Recombinant Mammalian SWI/SNF Subunits," Genes & Development 14:2441-2451 (2000)
P	BE-1	Kadonaga, J.T., "Eukaryotic Transcription: An Interlaced Network of Transcription Factors and Chromatin-Modifying Machines," <i>Cell</i> <u>92</u> :307-313 (1998)
1	BF-1	Kehle et al., "dMi-2, Hunchback-Interacting Protein that Functions in <i>Polycomb</i> Repression," <i>Science</i> 282:1897-1900 (1998)
S	BG-1	Kim et al., "Hybrid Restriction Enzymes: Zinc Finger Fusions to Fok I Cleavage Domain," PNAS 93(3):1156-1160 (1996)
4	BH-1	Kingston et al., "ATP-Dependent Remodeling and Acetylation as Regulators of Chromatin Fluidity," <i>Genes & Development</i> 13:2339-2352 (1999)
1	BI-1	Klug, A., "Zinc Finger Peptides for the Regulation of Gene Expression," <i>J. Mol. Biol.</i> 293:215-218 (1999)
13	BJ-1	Knoepfler et al., "Sin Meets NuRD and Other Tails of Repression," <i>Cell</i> <u>99</u> :447-450 (1999)
19	BK-1	Kornberg et al., "Twenty-Five Years of the Nucleosome, Fundamental Particle of the Eukaryote Chromosome," <i>Cell</i> 98:285-294 (1999)
19	BL-1	Kouzarides,T., "Histone Acetylases and Deacetylases in Cell Proliferation," <i>Current Opin. Genet. Devel.</i> 9:40-48 (1999)

Examiner:	Will	250	lole	Date Considered: ノーム・	_2 ك-
		<i>//</i>			





Atty Dkt No. 8325-0014

COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) Sheet <u>5</u> of <u>9</u>

In the Application of Wolffe and Collingwood

Serial No.: 09/844,508

Filed: April 27, 2001

Art Unit: 1645 1656
Examiner: unassigned ALMAN

Title: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

Exam. Init.	Ref. Desig.	Description
M	BM-1	Kuo et al., "Roles of Histone Acetyltransferases and Deacetylases in Gene Regulation," <i>BioEssays</i> 20:615-626 (1998)
M	BN-1	Laurent et al., "Functional Interdependence of the Yeast SNF2, SNF5, and SNF6 Proteins in Transcriptional Activation," PNAS 88:2687-2691 (1991)
4	BO-1	LeRoy et al., "Requirement of RSF and FACT for Transcription of Chromatin Templates in Vitro," Science 282:1900-1904 (1998)
	8P-1	McDowell et al., "Localization of a Putative Transcriptional Regulator (ATRX) at Pericentromeric Heterochromatin and the Short Arms of Acrocentric Chromosomes," PNAS 96:13983-13988 (1999)
M	BQ-1	Miller et al., "Repetitve Zinc-Binding Domains in the Protein Transcription Factor IIIA From <i>Xenopus</i> Oocytes," <i>EMBO J.</i> <u>4</u> :1609-1614 (1985)
.1	BR-1	Mizzen et al., "Linking Histone Acetylation to Transcriptional Regulation," <i>Cellular and Molecular Life Sciences</i> <u>54</u> :6-20 (1998)
B	BS-1	Munshi et al., "Acetylation of HMG I(Y) by CBP Turns Off IFN β Expression by Disrupting the Enhanceosome," <i>Molecular Cell</i> 2:457-467 (1998)
11	BT-1	Muchardt et al., "A Human Homologue of Saccharomyces cerevisiae SNF2/SW12 and Drosophila brm Genes Potentiates Transcriptional Activation by the Glucocoticoid Receptor," EMBO Journal 12:4279-4290 (1993)
1	BU-1	Muchardt et al., "ATP-Dependent Chromatin Remodelling: SWI/SNF and Co. are on the Job," <i>Journal of Molecular Biology</i> 293:187-198 (1999)

Examiner:	Willia	Schools	Date Considered:	3-6-07	



CH CENTER 1600/2900

TEMENT

COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

> FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) Sheet <u>6</u> of <u>9</u>

In the Application of Wolffe and Collingwood

Serial No.: 09/844,508

Filed: April 27, 2001

Art Unit: 1645

Examiner: unassigned ALLANN

Title: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

Exam. Init.	Pof Dosig	Description
Exam. Init.	Ref. Desig. BV-1	Murphy et al., "Human SWI-SNF Component BRG1 Represses Transcription of the c-fos Gene," Molecular and Cellular Biology 19(4):2724-2733 (1999)
11)	8W-1	Näär et al., "Composite Co-Activator ARC Mediates Chromatin-Directed Transcriptional Activation," <i>Nature</i> 398:828-832 (1999)
M	BX-1	Neely et al., "Activation Domain-Mediated Trargeting of the SWI/SNF Complex to Promoters Stimulates Transcription from Nucleosome Arrays," <i>Molecular Cell</i> 4:649-655 (1999)
1	BY-1	Ng et al., "Histone Deacetylases: Silencers for Hire," <i>Trends Biochem</i> . Sci. <u>25</u> :121-126 (2000)
B	BZ-1	Pazin et al., "ATP-Dependent Nucleosome Reconfiguration and Transcriptional Activation from Preassembled Chromatin Templates," <i>Science</i> 266:2007-2011 (1994)
h	CA-1	Peterson et al., "Promoter Targeting and Chromatin Remodeling by the SWI/SNF Complex," Current Opinions in Genetics & Development 10:187-192 (2000)
3	CB-1	Peterson et al., "Recruitment of Chromatin Remodeling Machines," <i>Journal of Cellular Biochemistry</i> 78:179-185 (2000);
4	CC-1	Picketts et al., "ATRX Encodes a Novel Member of the SNF2 Family of Proteins: Mutations Point to a Common Mechanism Underlying the ATR-X Syndrome," <i>Human Molecular Genetics</i> 5(12):1899-1907 (1996)
3	CD-1	Rachez et al., "Ligand-Dependent Transcription Activation by Nuclear Receptors Requires the DRIP Complex," <i>Nature</i> 398:824-828 (1999)

Examiner:	OS TOU	As Galat	Date (Considered: $\frac{3}{2}$ $\left(-\sigma^{2} \right)$



Atty Dkt No. 8325-0014

MAY 1 4 2002 ECH CENTER 1600/2900

COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 7 of 9

In the Application of Wolffe and Collingwood

Serial No.: 09/844,508

Filed: April 27, 2001

Title: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

Art Unit: 1645 /636

Exam. Init.	Ref. Desig.	Description
9	CE-1	Rea et al., Regulation of Chromatin Structure by Site-Specific Histone H3 Methyltransferases," <i>Nature</i> 406:593-599 (2000)
(1)	CF-1	Rhodes et al., "Zinc Fingers," Scientific American 268(2):56-65 (1993)
M	CG-1	Roth et al, "Histone Acetylation and Chromatin Assembly: A Single Escort, Multiple Dances?," Cell 87:5-8 (1996)
1	CH-1	Sassone-Corsi et al., "Requirement of Rsk-2 for Epidermal Growth Factor-Activated Phosphorylation of Histone H3," <i>Science</i> 285:886-891 (1999)
11)	CI-1	Schultz et al., "Targeting Histone Deacetylase Complexes Via KRAB-Zinc Finger Proteins: The PHD and Bromodomains of KAP-1 Form a Cooperative Unit That Recruits a Novel Isoform of the Mi-2α Subunit of NuRD," <i>Genes & Development</i> 15:428-443 (2001)
.1	CJ-1	Sterner et al., "Studies of Acetylation and Deacetylation in High Mobility Group Proteins," <i>The Journal of Biological Chemistry</i> 256(17):8892-8895 (1981)
12	CK-1	Sterner et al., "Acetylation of Histones and Transcription-Related Factors," Microbiology and Molecular Biology Review 64(2):435-459 (2000)
19	CL-1	Strahl et al., "The Language of Covalent Histone Modifications," <i>Nature</i> 403:41-45 (2000)
4	CM-1	Struhl, "Histone Acetylation and Transcriptional Regulatory Mechanisms," <i>Genes Dev.</i> 12:599-606 (1998)
12	CN-1	Sudarsanam et al., "Whole-Genome Expression Analysis of <i>snf/swi</i> Mutants of Saccaromyces Cerevisiae," <i>Proc. Natl. Acad. Sci. U.S.A.</i> <u>97</u> :3364-3369 (2000)

Examiner: Limit 5-p MS Date Considered: >-6-0>



RECEIVED

MAY 1 4 2002

Atty Dkt No. 8325-000 1800/2900

COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 8 of 9

In the Application of Wolffe and Collingwood

Serial No.: 09/844,508

Filed: April 27, 2001

Art Unit: 1648

Examiner: unassigned BYARA

Title: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

Exam. Init.	Ref. Desig.	Description
20	CO-1	Sudarsanam et al., "The Swi/Snf Family Nucleosome-Remodeling Complexes and Transcriptional Control," <i>Trends in Genetics</i> <u>16</u> :345-351 (2000)
N	CP-1	Tsukiyama et al., "Purification and Properties of an ATP-Dependent Nucleosome Remodeling Factor," Cell 83:1011-1020 (1995)
M	CQ-1	Tsukiyama et al., "Characterization of the Imitation Switch Subfamily of ATP-Dependent Chromatin-Remodeling Factors in Saccharomyces cerevisiae," Genes Dev. 13:686-697 (1999)
M	CR-1	Tyler et al., "The "Dark Side" of Chromatin Remodeling: Repressive Effects on Transcription," <i>Cell</i> <u>99</u> :443-446 (1999)
N	CS-1	Van Steensel et al., "Identification of <i>In Vivo</i> DNA Targets of Chromatin Proteins Using Tethered Dam Methyltransferase," <i>Nature Biotechnology</i> 18:424-428 (2000)
1	CT-1	Varga Weisz et al., "Energy-Dependent Chromatin Accessiblity and Nucleosome Mobility in a Cell-Free System," <i>EMBO J.</i> <u>14</u> (10):2209-2216 (1995)
M	CU-1	Varga Weisz et al., "Chromatin-Remodelling Factor CHRAC Contains the ATPases ISWI and Topoisomerase II," <i>Nature</i> . 388:598-602 (1997)
M	CV-1	Wade et al., "Histone Acetylation: Chromatin in Action," <i>Trends Biochem Sci</i> <u>22</u> :128-132 (1997)
1	CW-1	Wallberg et al., "Recruitment of the SWI-SNF Chromatin Remodeling Complex as a Mechanism of Gene Activation by the Glucocorticoid Receptor t1 Activation Domain," <i>Molecular and Cellular Biology</i> 20(6):2004-2013 (2000)

_	151		Considered:	7-6-03
Examiner:	William	Solal	Date Considered:	



Atty Dkt No. 83257014

MAY 1 4 20 AECH CENTER 16

COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS
FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)
Sheet 9 of 9

In the Application of Wolffe and Collingwood

Serial No.: 09/844,508

Filed: April 27, 2001

Art Unit: 1645

Examiner unassigned AVANAN

Title: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

Exam. Init.	Ref. Desig.	Description		
CX-1 Wolffe et al., "Review: Chromatin Structural Features and Targets That Re- Transcription," Journal of Structural Biology 129:102-122 (2000)				
n	CY-1	Wolffe et al., "Co-Repressor Complexes and Remodeling Chromatin for Repression," Biochemical Society Transactions <u>28</u> (4):379-386 (2000)		
4	CZ-1	Wolffe et al., "Targeting Chromatin Disruption Transcription Regulators That Acetylate Histones," Cell 84:817-819 (1996)		
3	DA-1	Wong et al., "Determinants of Chromatin Disruption and Transcriptional Regulation Instigated by the Thyroid Hormone Receptor: Hormone-Regulated Chromatin Disruption is Not Sufficient for Transcriptional Activation," <i>EMBO Journal</i> 16(11):3158-3171 (1997)		
4	DB-1	Workman et al., "Alteration of Nucleosome Structure as a Mechanism of Transcriptional Regulation," <i>Ann. Rev. Biochem.</i> <u>67</u> :545-579 (1998)		
M	DC-1	Xu et al., "Cytosine Methylation Targetted to Pre-Determined Sequences," <i>Nature Genetics</i> 17:376-378 (1997)		
3	DD-1	Yoshinaga et al., "Roles of SWI1, SWI2, and SWI3 Proteins for Transcriptional Enhancement by Steroid Receptors," <i>Science</i> 258:1598-1604 (1992)		

Examiner: William Sold!

Date Considered:

3-6-03

COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231



Dkt No. 8325-0014

COPY OF PAPERS ORIGINALLY FILED

FORM PTO-1449 (Modifi d) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)

Sheet _1_ of _1_

Art Unit: 164

Confirmation No. 9058

Examiner: unassigned

RECEIVED

JUN 2 1 2002

TECH CENTER 1600/2900

In th Application of Wolffe and Collingwood

Serial N .: 09/844,508

Filed: April 27, 2001

Titl: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

U.S. PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Date	Name	Class	Sub Class	Filing Date
	AA-2						

FOREIGN PATENT DOCUMENTS

Exam. Init.	Ref. Desig.	Document No.	Publication Date	Country or Patent Office	Class	Sub Class	Trans YES	lation NO
	AB-2					<u> </u>		

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Exam. Init.	Ref. Desig.	Description
2	AC-2	White et al., "Ligand-Independent Activation of the Oestrogen Receptor by Mutation of a Conserved Tyrosine," <i>EMBO Journal</i> 16(6):1427-1435 (1997)

Examiner:	William	Sable	Dat Consid red: 3-6-03
	A 4:1 1 14 1: -1		that we will be a suffered with MDEDCOO. Draw a line through the